

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (previously presented) A DNA segment encoding a human type  $\alpha$  PDGF receptor protein.
2. (previously presented) A DNA segment according to claim 1, wherein said segment comprises genomic clone T11 or cDNA clone TR4.
3. (previously presented) A DNA segment, according to claim 1, wherein said protein has the amino acid sequence defined in Figure 3.
4. (previously presented) A recombinant DNA molecule comprising a DNA segment according to claim 1 and a vector.
5. (previously presented) A culture of cells transformed with a DNA segment according to claim 1.
6. (previously presented) A method of producing a human type  $\alpha$  PDGF receptor protein comprising culturing cells according to claim 5 under conditions such that said protein is produced and isolating said protein from said cells.
7. (previously presented) A human type  $\alpha$  PDGF receptor protein having the amino acid sequence defined in Figure 3.

8. (previously presented) An antibody specific for a protein having the amino acid sequence of a type  $\alpha$  human PDGF receptor protein, according to claim 7.
9. (previously presented) An antibody according to claim 8, wherein said antibody is specific for only a type  $\alpha$  PDGF receptor protein.
10. (previously presented) An antibody specific for a protein having the amino acid sequence of a type  $\beta$  human PDGF receptor protein, wherein said antibody is specific for only a type  $\beta$  human PDGF receptor protein.
11. (previously presented) A bioassay for expression of a type  $\alpha$  PDGF receptor gene comprising the steps of:
  - i) contacting a biological sample suspected of containing RNA with a DNA probe comprising a DNA segment according to claim 1, under conditions such that a DNA:RNA hybrid molecule containing said DNA probe and complementary RNA is formed; and
  - ii) determining the amount of said DNA probe present in said hybrid molecules.
12. (previously presented) A bioassay for a type  $\alpha$  PDGF receptor antigen comprising the steps of:
  - i) contacting a biological sample suspected of containing polypeptides with an antibody according to claim 8, under conditions such that a specific complex of said antibody and said antigen is formed; and
  - ii) determining the amount of said antibody in said complexes.

13. (previously presented) A bioassay for type  $\beta$  PDGF receptor antigen comprising the steps of:

- i) contacting a biological sample suspected of containing polypeptides with an antibody according to claim 10, under conditions such that a specific complex of said antibody and said antigen is formed; and
- ii) determining the amount of said antibody in said complexes.

14. (currently amended) A method of evaluating binding affinity of a test compound to alpha platelet derived growth factor receptor ( $\alpha$  PDGFR) or beta platelet derived growth factor receptor ( $\beta$  PDGFR),  ~~$\alpha$  PDGF receptor~~, said method comprising the steps of:

a) contacting a sample containing said receptor with

(i) an antibody which specifically binds  $\alpha$  PDGFR or  $\beta$  PDGFR or a fragment thereof wherein the antibody is selected from the group consisting of (a) monoclonal antibody and (b) polyclonal antibody ~~the monoclonal antibody or fragment thereof of claim 8;~~ and

(ii) said test compound;

b) measuring the amount of said ~~monoclonal~~ antibody or fragment thereof, said amount being inversely proportional to the amount of test compound which bound to said receptor.

15. (newly added) The method of claim 14, wherein the test compound is an agonist.

16. (newly added) The method of claim 14, wherein the test compound is an antagonist.

17. (newly added) The method of claim 14, wherein the test compound is a PDGF-AA isoform.
18. (newly added) The method of claim 14, wherein the test compound is a PDGF-AB isoform.
19. (newly added) The method of claim 14, wherein the test compound is a PDGF-BB isoform.
20. (newly added) The method of claim 14, wherein the antibody or fragment thereof is specific for a protein having the amino acid sequence of a human type  $\alpha$  PDGF receptor protein.
21. (newly added) The method of claim 14, wherein the antibody or fragment thereof is specific for a protein having the amino acid sequence of a human type  $\beta$  PDGF receptor protein.